

Product name : CleanKraft Descaler

Version 1.0

MSDS Number : SDSCKDS-001

Print date : 01-Aug-2015



1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Trade name : Clean Kraft Descaler – 5Ltrs
Use of the product : Descaler
Company : Innochem Labs (India) Private Limited
Plot A 15, Road no. 9, IDA Nacharam,
Hyderabad, Telangana 500 076.
Emergency telephone : + 91-40-65551717, +91-703215008

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance/Odor : Transparent Liquid

The Product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : C; R35

Human health hazards : Causes severe burns

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on the health hazards effects and symptoms.

Potential Health Effects

Eyes : Immediately call a Poison Centre or Physician.

Skin : Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a Poison center or physician.

Inhalation : Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or Physician.

Ingestion : Immediately call a poison center or Physician. Do not induce vomiting.

Safety : Keep out of the reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (Show the label where possible). If swallowed, seek medical advice immediately and show this container or label.

Aggravated Medical Condition: Seek medical advice.

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No.	Weight %
Phosphoric acid, solution	7664-38-2	15-30
Other ingredients classified as not hazardous according to NOHSC		to 100

4. FIRST AIDS AND MEASURES**4.1 Description of first aid measures**

Eye Contact	Get medical attention immediately. Call a poison center physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	Get medical attention immediately. Call a poison center physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin Contact	Get medical attention immediately. Call a poison center physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Get medical attention immediately. Call a poison center physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter lungs. By Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable

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training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water removing it, or wears gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects	
Eye Contact	Causes serious eye damage.
Inhalation	May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
Skin Contact	Causes severe burns.
Ingestion	May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms	
Eye Contact	Adverse symptoms may include the following: Pain Watering redness
Inhalation	No specific data
Skin Contact	Adverse symptoms may include the following: Pain or irritation Redness Blistering may occur
Ingestion	Adverse symptoms may include the following: Stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	None Unknown

5.2 Special hazards arising from the substance or mixture

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Hazards from the substance or mixture	In a fire or heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	Decomposition products may include the following materials: Phosphorous oxides
5.3 Advice for firefighters	
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the accident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Specific hazards during firefighting: None Unknown	
6. ACCIDENTAL RELEASE MEASURES	
6.1 Personal precautions, protective equipment and emergency procedures	
For non-emergency personnel : No action shall be taken involving any personal risks or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilator is inadequate. Put on appropriate personal protective equipment.	
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environment pollution (sewers, waterways, soil or air).	
6.3 Methods and materials for containment and cleaning up	
Major Spills	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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<p>Large Spills</p>	<p>: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillage into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.</p> <p>6.4 Reference to other sections:</p> <p>See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.</p>
<p>7. HANDLING AND STORAGE</p> <p>The information this section contains generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available information provided in the Exposure scenarios(s).</p> <p>7.1 Precautions for safe handling</p> <p>Protective Measures : Put on appropriate personal protective equipment (See Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a combustible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.</p> <p>Advice on general : Eating, drinking and smoking should be prohibited in areas where this occupational hygiene material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional information on hygiene measures.</p> <p>7.2 Conditions for safe storage, including any incompatibilities</p> <p>Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (See Section 10) and food and drink. Store locked up. Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid</p>	

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environmental contamination.

7.3 Specific end use(s)

Recommendations : Cleaning/washing agents and additives.
 Industrial sector specific solutions: Not available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

The information in this section contains full generic advice and guidance. The list of identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control ParametersOccupational Exposure Limits:

Product/Ingredient Name Europe	Exposure Limit Values
Phosphoric Acid, Solution	EU OEL(Europe 12/2009).Notes: List of indicative occupation exposure limit values TEA : 1mg/m ³ 8 hours STEL : 2mg/m ³ 15 minutes

Recommended monitoring procedures: If this products contains ingredients with exposure limits, personal, workplace, atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards such as the following: European standard EN 689 (workplace atmospheres-Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European standard EN 14042 (Workplace atmospheres- Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents). European standard EN 482 (Workspace atmospheres- General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.2 Manufacturer: Exposure controls

Appropriate Engineering Controls: If user operations generate dust, fumes, gas, vapor or mist use process enclosures, local exhaust ventilation or other engineering

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controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual Protection measures

Hygiene measures

: Wash hands forearms and face thoroughly after handling chemical products before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection. Chemical splash goggles and/or face shield. If inhalation hazards exist a full-face respirator may be required instead.

Skin Protection

Hand protection

: Chemical resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances. The protection time of the glove cannot be accurately estimated.

Permeation level 6, Penetration level 3 following EN374, taking into consideration the exposure of chemicals given in chapter 3.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other Skin Protect

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is

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necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental Exposure Controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fumes, scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Form	: Liquid
Color	: Clear colorless liquid
Odor	: According to fragrance
pH	: 7.0 - 9.0 (100%) at 20°C
Melting point	: NA
Boiling point	: 105 Deg C
Freezing point	: NA
Initial boiling Point	: NA
Flash point	: 57°C / 135°F- ISO 3680
Evaporation rate	: NA
Water solubility	: Miscible
Viscosity, dynamic	: NA
Density	: 1.095 to 1.115 g/cm ³
Solubility (ies)	: Easily soluble in following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Not available
Decomposition temperature	: Not available
Explosive Properties	: NA
Oxidizing properties	: NA
Corrosivity Remarks	: NA

7.2 Other information

No additional information

10. STABILITY AND REACTIVITY

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical Stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous will not occur. Reactions

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10.4 Conditions to avoid

: No specific data

10.5 Incompatible materials

: Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air Reactive or incompatible with the following metals: alkalis.

10.6 Hazardous decomposition Products

: Under normal conditions of storage and use, hazard decomposition products should not be produced.

Instability Conditions

: Keep away from strong acids.

Instability temperature

: Not available.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Actual Toxicity

Production/Ingredient name	Result	Species	Dose	Exposure
Phosphoric acid, solution	LD50 Oral	Rat	1.25 g/kg	-

Actual Toxicity Estimates

: Not available

Irritation/Corrosion

: No known effect according to our database

Sensitization

: No known according to our database.

Mutagenicity

: No known effect according to our database

Carcinogenicity

: No known effect according to our database

Reproductive Toxicity

: No known effect according to our database

Teratogenicity

: No known effect according to our database

Specific target organ toxicity (repeat exposure)

No known effect according to our database

Aspiration hazard

: No known effect according to our database

Potential acute health effects

Eye Contact	May cause serious eye damage.
Inhalation	May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
Skin Contact	Adverse symptoms may include the following: Stomach pains.

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**Delayed and immediate effects and also chronic effects from short and long term exposure**

<u>Short term exposure</u>	
Potential immediate effects	Not available
Potential delayed effects	Not available
<u>Long term exposure</u>	
Potential immediate effects	Not available
Potential delayed effects	Not available
<u>Potential Chronic health effects</u>	
Not available.	

Conclusion/Summary : Not available.
 General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

Other information : Not available

12. ECOLOGICAL INFORMATION**12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
Phosphoric acid, solution	Acute EC50 105 ppm Fresh water	Daphnia-Daphnia	48 hours
	Acute LC50 60 ppm Fresh water	manga Fish- Lpomis macrochirus	96 hours

12.2 Persistence and degradability : No known effect according to our database.

12.3 Bioaccumulative potential : No known effect according to our database.

12.4 Mobility in soil/water partition: Not available

co efficient (K_{∞}) Mobility

12.5 Results of PBT and vPvB assessment

PBT : Not available

vPvB : Not applicable

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**12.6 Other adverse effects** : No known significant effects or critical hazards

Release of large quantities into water may cause a pH-change resulting in danger for aquatic life.

13. DISPOSAL CONSIDERATIONS

The information this section contains generic advice and guidance. The list of identified Uses in section should be consulted for any available use specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods**Product****Methods of disposal**

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

: The classification of the product may meet the criteria for a hazardous waste.

Packaging**Methods of Disposal**

: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special Precautions

: This material and its container must be disposed of in safe way. Care should be taken when handling emptied containers that have not been cleaned rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	3264	3264	3254	3264
14.2 UN proper shipping name	Corrosive liquid.acidic, inorganic, n.o.s.(Phosphoric Acid)	Corrosive liquid.acidic, inorganic, n.o.s.(Phosphoric Acid)	Corrosive liquid.acidic, inorganic, n.o.s.(Phosphoric Acid)	Corrosive liquid.acidic, inorganic, n.o.s.(Phosphoric Acid)

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14.3 Transport hazard class(es)	8			
14.4 Packing group	III	III	III	III
14.5 Environmental Hazards	No	No	No	No
Additional information	-	-	-	-

15. REGULATORY INFORMATION

Chemical Safety Assessment following regulation 1907/2006/EC: Not relevant.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Europe Inventory Integrated pollution prevention and control list (IPPC) - Water : All components are listed or exempted.

Hazard class for water : 1 Appendix No. 4

16. OTHER INFORMATION

Indicates information that has changed from previously issued version.

Abbreviations and Acronyms: ATE = Acute Toxicity Estimate.

CLP = Classification, Labelling and Packaging Regulation
[Regulation (EC) No 1272/2008]

DNEL = Derived No Effect Concentration.

RRN = REACH Registration Number

Key literature references and sources for data : Not available

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Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Skin Corr. 1, H314

Eye Dam. 1 H318

Procedure used to derive the classification according to Regulation (EC) No.1272/2008 [CLP/GHS]

Classification	Justification
Skin Corr. 1, H314	On basis of test data
Eye Dam. 1, H318	On basis of test data

Europe

Full Text of abbreviated H Statements : H314 Causes severe skin burns and eye damage.
H 318 Causes serious eye damage.

Full text of classifications : Eye Dam. 1, H318SERIOUS EYE DAMAGE?EYE IRRITATION-
Category 1
Skin Corr. 1, 314 SKIN CORROSION/IRRITATION- Category 1
Skin Corr. 1B, 314 SKIN CORROSION/IRRITATION- Category 1B

Full text of abbreviated R – Phrases : R34-Causes burns.
R35-Causes severe burns.

Full text of classifications (DSD/DPD) : C – Corrosive

Further information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named- supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.